

## **LISTING OF THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.     **(Original)**     A lighting apparatus using microwave energy, comprising:  
a magnetron disposed inside a casing, for generating microwave energy;  
a waveguide for guiding microwave energy;  
a resonator providing a resonant region in which the microwave energy is resonated;  
a bulb disposed inside the resonator, and filled with a material which emits light, when excited by the microwave energy; and  
a rear mirror integrally fixed to a rear of the bulb, for forwardly reflecting light rearwardly emitted from the bulb.
2.     **(Original)**     The apparatus of claim 1, wherein the rear mirror is formed in a hemispherical shape having a curved shape.
3.     **(Original)**     The apparatus of claim 2, wherein the bulb is positioned at a focal point of the curved surface of the rear mirror.
4.     **(Original)**     The apparatus of claim 1, wherein the rear mirror is made of a quartz material.
5.     **(Original)**     The apparatus of claim 1, further comprising a fixed mirror fixed to the casing at a rear side of the bulb and having a hole in which a bulb stem rearwardly extended from the bulb is rotatably inserted, for forwardly reflecting light emitted to the rear of the bulb.
6.     **(Original)**     The apparatus of claim 5, wherein a diameter of the hole of the fixed mirror is formed to be smaller than a width of the rear mirror.

7. **(Original)** The apparatus of claim 5, wherein the fixed mirror is formed in a hemispherical shape having a curved shape.

8. **(Original)** The apparatus of claim 7, wherein the bulb is positioned at a focal point of the curved surface of the fixed mirror.

9. **(Original)** The apparatus of claim 5, wherein the rear mirror is formed in a hemispherical shape having a curved shape.

10. **(Original)** The apparatus of claim 9, wherein the bulb is positioned at a focal point of the curved surface of the rear mirror.

11. **(Original)** The apparatus of claim 5, wherein the rear mirror is made of a quartz material.

12. **(Original)** The apparatus of claim 5, wherein the fixed mirror is made of a ceramic material.

13. **(Original)** The apparatus of claim 12, wherein the fixed mirror is made of an  $\text{Al}_2\text{O}_3$ ,  $\text{Si}_3\text{N}_4$  or  $\text{AlN}$  material.